

III. CLAIM AMENDMENTS

1. (Original) A hand-held device comprising a processor, a digital camera for capturing motion video or still images, and means for transforming a signal from the camera into a motion signal indicative of the motion of the hand-held device.
2. (Original) A hand-held device according to claim 1, further comprising a user interface in which motion of the hand-held device is - through the motion signal derived thereof - used as a user input.
3. (Currently Amended) A hand-held device according to claim 1 or 2, further comprising a display suitable for displaying captured images.
4. (Original) A hand-held device according to claim 3, in which motion of a given type of the hand-held device is used to manipulate images shown at least in part on the display, preferably by moving the images in a manner substantially corresponding to the movement of the hand-held device.
5. (Original) A hand-held device according to claim 4, in which a given type of motion the hand-held device is used to move, and/or zoom, and/or expand/collapse and/or rotate images displayed on the display.

6. (Original) A hand-held device according to claim 5, in which motion substantially parallel to the plane of the display of the hand-held device is used to scroll an image displayed on the display, and/or motion substantially perpendicular to the plane of the display is used to zoom an image displayed on the display and/or rotational motion of the hand-held device is used to rotate an image displayed on the display.

7. (Currently Amended) A hand-held device according to claim ~~4any of claims 4 to 6~~, in which the images are images previously captured by the camera.

8. (Currently Amended) A hand-held device according to claim ~~4any of claims 4 to 7~~, in which movement of image is inverted with respect to motion of the hand-held device.

9. (Currently Amended) A hand-held device according to claim ~~2any of claims 2 to 8~~, in which the user interface comprises a graphical user interface, and wherein motion of the hand-held device is used as an input to the graphical user interface.

10. (Original) A hand-held device according to claim 9, in which motion of the hand-held device is used to manipulate an object displayed by the graphical user interface, preferably by moving the object in a manner substantially corresponding to the motion or to the inverted motion of the hand-held device, whereby the object displayed by the graphical user interface can be, an icon, a dialogue box, a window, a menu or a pointer.

11. (Original) A hand-held device according to claim 9, in which motion of a given type of the hand-held device is used to move, and/or zoom, and/or expand/collapse and/or rotate objects displayed by the graphical user interface.

12. (Original) A hand-held device according to claim 11, in which motion substantially parallel to the plane of the display of the hand-held device is used to scroll an object displayed by the graphical user interface, and/or motion substantially perpendicular to the plane of the display is used to zoom an object displayed by the graphical user interface and/or rotational motion of the hand-held device is used to rotate an object displayed by the graphical user interface.

13. (Currently Amended) A hand-held device according to claim ~~any of claims 2 to 12~~, in which the digital camera is detachable.

14. (Currently Amended) A hand-held device according to claim ~~any of claims 2 to 13~~, in which the digital camera is movable relative to the hand-held device.

15. (Currently Amended) A hand-held device according to claim ~~any of claims 2 to 14~~, in which the means for transforming a signal from the camera into a motion signal derives the motion signal from changes between succeeding images, or parts of succeeding images captured by the camera.

16. (Currently Amended) A hand-held device according to claim
2any of claims 2 to 15, in which the camera has an autofocus
system, whereby the focusing setting of the autofocus system is
used for detecting movement in the camera direction.

17. (Currently Amended) A hand-held device according to claim
2any of claims 2 to 16, further comprising at least one key,
wherein the functionality of a motion type is dependent on the
state of the at least one key.

18. (Currently Amended) A hand-held device according to claim
2any of claims 2 to 17, in which rotational motion of the hand-
held device about an axis substantially perpendicular to the
display results in an inverse rotational movement of the image
or graphical user interface object relative to the display,
preferably in a manner such that the image or object is static
with respect to the fixed coordinate system in which the hand-
held device is situated.

19. (Currently Amended) A hand-held device according to claim
2any of claims 2 to 18, in which the motion signal is used to
adjust device settings, the device settings preferably
comprising sound settings and display settings.

20. (Currently Amended) A hand-held device according to claim
9any of claims 9 to 19, further comprising a keypad with at
least a first- and a second key and the graphical user interface
comprises a cursor, whereby motion of the hand-held device is
used to position the cursor over an object of the graphical user

interface and primary functions associated with the object concerned are activated by pressing the first key and secondary functions associated with the object of the concerned are activated by pressing the second key.

21. (Original) A hand-held device according to claim 20, in which the functionality of the first key is associated with selection and activation of objects of the graphical user interface, and in which the functionality of the second key is preferably associated with calling up a context-sensitive menu.

22. (Original) A hand-held device according to claim 21, in which selection of the object concerned is performed by pressing and releasing the first key, and activation of the object concerned is preferably performed by pressing and releasing the first key twice in rapid succession.

23. (Currently Amended) A hand-held device according to claim 21-~~or 22~~, in which moving or resizing of the object concerned is performed by holding down the first key while moving the hand-held device to move the cursor.

24. (Currently Amended) A hand-held device according to claim 20~~any of claims 20 to 23~~, in which the first key and the second key are softkeys whereby the current functionality of the softkeys is shown in the display, preferably in dedicated fields of the display.

25. (Original) A hand-held device according to claim 24, in which the first key is placed below the display on the left side of the latter, preferably proximate to lower edge of the display, and the second key is placed below the display on the right side of the latter, preferably proximate to lower edge of the display.

26. (Currently Amended) A hand-held device according to claim ~~any of claims 1 to 25~~, further comprising at least one gravity based tilt sensor, and whereby the signal from the at least one tilt sensor is used in combination with the signal from the camera for creating the motion signal.

27. (Original) A hand-held device according to claim 26, wherein a tilt sensor is associated with the X-axis and/or a tilt sensor is associated with the z-axis.

28. (Original) A hand-held device according to claim 27, wherein the signal form the at least one tilt sensor is used to determined the absolute orientation of the handheld device relative to the direction of the gravitational pull.

29. (Currently Amended) A hand-held device according to claim ~~any of claims 1 to 28~~, further comprising means for sending the motion signal to another terminal via cable, infrared waves or radio frequency waves.

30. (Original) A system comprising a hand-held device according to claim 29 and a terminal capable of displaying imaginary three-dimensional objects on a two-dimensional screen, said terminal comprising means to change the orientation of the displayed object in response to signals received from the handheld device, whereby orientation changes of the hand-held device are translated to corresponding orientation changes of the displayed object.

31. (Original) A system according to claim 30, in which position changes of the handheld device are translated to position changes of the displayed object.

32. (Original) A system comprising a hand-held device according to claim 29 and a terminal capable of displaying an imaginary three-dimensional space on a two-dimensional screen, said terminal comprising means to change the viewing position in the imaginary three-dimensional space in response to signals received from the handheld device, whereby positional changes of the hand-held device are translated to corresponding changes in the viewing position.

33. (Original) A system according to claim 30, in which orientation changes of the handheld device are translated into corresponding changes in the viewing direction in the imaginary three-dimensional space.

34. (Original) A method for creating user input for a hand-held device that has a processor, a user interface and a digital

camera for capturing motion video or still images comprising the steps of:

determining motion of the hand-held device from the camera signal;

using the determined motion of the hand-held device as an input for the user interface.

35. (Original) Use of a digital camera for capturing motion video or still images of a hand-held device that has a processor to produce a motion signal indicative of motion of the hand-held device.

36. (Original) A hand-held device comprising a processor, means for sensing motion of the hand-held device, a display, a keypad with at least a first- and a second key, a graphical user interface with objects and a cursor, and means for transforming the sensed motion of the handheld device into a signal suitable for moving the cursor over the display.

37. (Original) A hand-held device according to claim 36, in which motion of the hand-held device is used to position the cursor over an object of the graphical user interface and primary functions associated with the object concerned are activated by pressing the first key and secondary functions associated with the object concerned are activated by pressing the second key.

38. (Original) A hand-held device according to claim 37, in which the functionality of the first key is associated with selection and activation of objects of the graphical user interface, and in which the functionality of the second key is preferably associated with calling up a context-sensitive menu.

39. (Original) A hand-held device according to claim 38, in which selection of the object concerned is performed by pressing and releasing the first key, and activation of the object concerned is preferably performed by pressing and releasing the first key twice in rapid succession.

40. (Currently Amended) A hand-held device according to claim 38-~~or~~-39, in which moving or resizing of the object concerned is performed by holding down the first key while moving the hand-held device to move the cursor and the object concerned in unison therewith.

41. (Currently Amended) A hand-held device according to claim 36~~any of claims 36 to 40~~, in which the first key and the second key are softkeys whereby the current functionality of the softkeys is shown in the display, preferably in dedicated fields of the display.

42. (Original) A hand-held device according to claim 41, in which the first key is placed below the display on the left side of the latter, preferably proximate to lower edge of the display, and the second key is placed below the display on the

right side of the latter, preferably proximate to lower edge of the display.

43. (Currently Amended) A hand-held device according to claim ~~36any of claims 36 to 42~~, in which said means for transforming motion of the handheld device into a signal suitable for moving the cursor over the display comprises a tilt sensor and/or an image capturing device and/or an accelerometer.

44. (Original) A hand-held device according to claim 43,, in which said image capturing device is a motion video or still image digital camera.

45. (Currently Amended) A hand-held device according to claim ~~36any of claims 36 to 44~~, further comprising means to transform a signal from the camera and/or tilt sensor and/or accelerometer into a position signal for the cursor.

46. (Original) A hand-held device according to claim 45, in which said means for transforming a signal from the camera into a motion signal derives the motion signal from the changes between succeeding images, or parts of succeeding images captured by the camera.

47. (Currently Amended) A hand-held device according to claim ~~44any of claims 44 to 46~~, in which the camera has an autofocus system, whereby the focusing setting of the autofocus system is used for detecting movement in the camera direction.

48. (Currently Amended) A hand-held device according to claim
~~36any of claims 36 to 47,~~ in which the graphical user interface
includes one or more of the following object types: icons,
dialogue boxes, windows, menus, pointers.